CLAIMS

1. A process for the production of a plate, in particular a motor vehicle licence plate, in which a reflection film (10; 10') is applied to a carrier (1) characterised in that in addition at least one layer sequence forming an electroluminescence flat capacitor (4, 5, 6, 7) is applied and a reflection film (10; 10') is selected whose reflection value is higher than the maximum statutory permissible value, and that said reflection value is reduced by further production steps to such an extent that it is below the maximum statutory permissible value.

2. A process as set forth in claim 1 characterised in that the layer sequence forming the electroluminescence flat capacitor (4, 5, 6, 7) is applied first and thereafter the reflection film (10; 10').

3. A process as set forth in claim 2 characterised in that the reflection film (10') includes a layer (16) which is opaque in relation to the light of the electroluminescence flat capacitor (4, 5, 6, 7) and that the further production steps involve providing the reflection film (10') with a grid raster of holes in which the size and surface density of the holes (19) are so selected that on the one hand the reflection value of the reflection film (10') averaged in relation to surface area comes to lie below the maximum value permitted by statute and on the other hand the brightness of the light passing through the openings from the electroluminescence flat capacitor (4, 5, 6, 7) averaged over the surface area exceeds the minimum value prescribed by statute.

4. A process as set forth in claim 2 characterised in that a reflection film (10) is used which is translucent for the light of the electroluminescence flat capacitor (4, 5, 6, 7) and whose reflection properties are based on it having on its rear side rearwardly projecting prismatic structures (12), at the interfaces of which the light incident from the front side is reflected by total reflection, and that the further production

steps involve applying the reflection film (10) to a layer (9) which is translucent in respect of the light of the electroluminescence flat capacitor (4, 5, 6, 7) and is of approximately the same optical refractive index as the rearwardly projecting prismatic structures (12) of the reflection film (10) and in that situation the intermediate spaces between the prismatic structures (12) are partially filled by the adhesive to such an extent that the reflection value of the reflection film (10) is reduced in the desired manner.

5. A process as set forth in claim 4 characterised in that the operation of filling the intermediate spaces between the prismatic structures by the adhesive is partially effected in respect of height by a procedure whereby the pressing pressure of the reflection film (10) and the viscosity of the adhesive at the time of pressing the reflection film (10) are so selected that the prismatic structures (12) which project on the rear side of the reflection film (10) penetrate into the adhesive only to such a depth that the total reflection which is reduced in the regions embedded in the adhesive reduces the reflection value of the reflection film (10) in the desired fashion.

6. A process as set forth in claim 4 characterised in that filling of the intermediate spaces between the prismatic structures (12) by the adhesive is effected partially in respect of height by the adhesive being applied to a layer which is so hard that it is substantially not deformable by the prismatic structures (12) projecting from the rear side of the reflection film (10) when the reflection film produced is subjected to pressure and by the thickness of the adhesive layer being so selected that the prismatic structures (12) which project on the rear side of the reflection film (10) and which when pressure is applied to the reflection film (10) penetrate with their tips as far as the hard layer engage into the adhesive only to such a depth that the total reflection which is reduced in the regions embedded in the adhesive reduces the reflection value of the reflection film (10) in the desired manner.

7. A process as set forth in claim 4 characterised in that filling of the intermediate spaces between the prismatic structures (12) by the adhesive is effected partially in respect of surface area in that, in surface regions disposed in mutually juxtaposed raster-like relationship, the intermediate spaces between the prismatic structures (12) are filled to differing heights so that the reflection value of the reflection film (10), which is averaged in respect of surface area, is below the maximum value permitted by statute.

8. A process as set forth in claim 7 characterised in that in first surface regions the intermediate spaces between the prismatic structures (12) are filled completely in respect of height by the adhesive while in the interposed second surface regions there is no filling of the intermediate spaces by the adhesive.

9. A process as set forth in one of claims 5 through 8 characterised in that filling of the intermediate spaces between the prismatic structures (12) by the adhesive is effected partially both in respect of height and also in respect of surface area.

10. A process as set forth in claim 2 characterised in that a reflection film (10) is used, which is translucent for the light of the electroluminescence flat capacitor (4, 5, 6, 7) and whose reflection properties are based on the fact that on its rear side it has rearwardly projecting prismatic structures (12), at the interfaces of which the light incident from the front side is reflected by total reflection, and that the further production steps provide that the reflection film (10) is subjected to a treatment which provides for flattening of the prismatic structures (12) which is so great that the reduction in total reflection caused thereby reduces the reflection value of the reflection film (10) in the desired manner.

11. A process according to claim 10 characterised in that the treatment of the reflection film (10) provides that it is heated to a given temperature for a given time.

12. A process as set forth in claim 10 characterised in that the treatment of the reflection film (10) provides that it is pressed for a given time under a given pressure against a surface which is harder than the prismatic structures (12).

13. A process as set forth in claim 10 and claim 11 characterised in that the treatment of the reflection film (10) provides that it is both heated and at the same time pressed.

14. A process as set forth in claim 10 and claim 11 characterised in that the two treatment steps are effected in time succession.

15. A process as set forth in one of claims 10 through 14 characterised in that the treatment steps carried out on the reflection film (10) leading to flattening of the prismatic structures (12) are effected upon the application thereof to the plate structure.

16. A process as set forth in claim 1 characterised in that firstly the reflection film (10; 10') is applied to the carrier (1) and thereafter a rastered electroluminescence flat capacitor (4, 5, 6, 7) is built up on the front side thereof which is towards the viewer, the structures (12) of the capacitor, in the regions covered by them, reducing the reflection value of the reflection film (10; 10') to such an extent that the reflection value of the reflection film (10; 10'), averaged in respect of surface area, is below the maximum value permitted by statute.

17. A plate, in particular a motor vehicle licence plate, which includes at least a carrier (1), a layer sequence forming an electroluminescence flat capacitor (4, 5, 6, 7) and a reflection film (10; 10'), characterised in that

the reflectance of the reflection film (10; 10'), which is originally above the maximum value permitted by statute, has been reduced in the course of the plate production process.

18. A plate as set forth in claim 17 characterised in that the layer sequence forming the electroluminescence flat capacitor (4, 5, 6, 7), as seen from the viewer, is behind the reflection film (10'), that the reflection film (10') includes a layer (16) which is opaque for the light of the electroluminescence flat capacitor, and that provided in the reflection film (10') is a grid raster of holes, the holes (19) of which extend through all layers of the reflection film (10') and the size and surface density thereof being so selected that the reflectance of the reflection film (10'), which results after application of the grid raster of holes, is below the maximum value permitted by statute.

19. A plate as set forth in claim 17 characterised in that the layer sequence forming the electroluminescence flat capacitor (4, 5, 6, 7), seen from the viewer, is behind the reflection film (10) which is transparent for the light of the electroluminescence flat capacitor, and that the prismatic structures (12) which project from the rear side of the reflection film (10) and at the interfaces of which the light incident from the front side is reflected by total reflection are partially embedded into a transparent layer (9) having approximately the same refractive index as the prismatic structures (12), in such a way as to afford a reduced total reflectance.

20. A plate as set forth in claim 19 characterised in that partial embedding is based on the fact that the prismatic structures (12) are not engaged over their entire height into the transparent layer (9) having approximately the same refractive index.

21. A plate as set forth in claim 19 or claim 20 characterised in that the prismatic structures (12) in differing surface regions of the flat side of

the plate are engaged to differing depths into the transparent layer (9) having substantially the same refractive index.

22. A plate as set forth in claim 21 characterised in that in first surface regions of the flat side of the plate the prismatic structures (12) are engaged with their entire height into a transparent layer (9) having substantially the same refractive index and in second surface regions they are not engaged into such a layer.

23. A plate as set forth in one of claims 19 through 22 characterised in that the layer (9) having substantially the same refractive index is an adhesive layer which serves at the same time for fixing the reflection film (10) on the layer therebeneath.

24. A plate as set forth in claim 17 characterised in that the layer sequence forming the electroluminescence flat capacitor (4, 5, 6, 7), seen from the viewer, is behind the reflection film (10) which is transparent for the light of the electroluminescence flat capacitor, and that the prismatic structures (12) which project from the rear side of the reflection film (10) and at the interfaces of which the light incident from the front side is reflected by total reflection are subsequently flattened off in such a way as to afford a reduced total reflectance.

25. A plate as set forth in claim 17 characterised in that the layer sequence forming the electroluminescence flat capacitor (4, 5, 6, 7), as seen from the viewer, is arranged in front of the reflection film (10) in rastered form and that the size and surface density of the structures thereof which do not transmit any light incident from the front side to the reflection film (10) or allow light reflected by the reflection film (10) to issue forwardly is so selected that the reflectance of the reflection film (10) is reduced in the desired fashion.